

## **REMARKS**

**[0002]** Applicant respectfully requests reconsideration and allowance of all of the claims of the application. Claims 1-9, 11, 14-19, 21-26, 28-43, and 45-52 are presently pending. Claims 7-9, 14-15, 17-19, 23, 25-26, 31-33, 35, 40-42, 46-48, and 51-52 are amended and claims 12 and 13 are canceled.

### **Statement of Substance of Interview**

**[0003]** Examiner Laurie Anne Ries graciously talked with me—the undersigned representative for the Applicant—on September 4, 2008. Applicant greatly appreciates the Examiner’s willingness to talk. Such willingness is invaluable to both of us in our common goal of an expedited prosecution of this patent application.

**[0004]** During the interview, differences between the Application and the cited art, namely U.S. Patent No. 6,175,845 (“Smith”) and U.S. Patent No. 6,694,485 (“Kelley”), were discussed. Without conceding the propriety of the rejections and in the interest of expediting prosecution, several possible clarifying amendments were proposed. In addition, amendments to the claims to overcome the 35 U.S.C. § 101 rejections were discussed.

**[0005]** Examiner Ries appeared to tentatively agree that some of the clarifying amendments may be patentable over the cited art if amended as discussed during the interview. In particular, the amendments relating to determining whether a virtual-page boundary is coextensive with a line of text of a virtual page of a digital document. However, Examiner Ries indicated that she would need to review the cited art more carefully and/or do another search, and requested that the proposed amendments be presented in writing.

**[0006]** Applicant amends the claims and presents arguments based on the discussion that occurred during the interview. Accordingly, Applicant submits that the pending claims are allowable over the cited art of record for at least the reasons discussed during the interview.

### **Formal Request for an Additional Interview**

[0007] If the Examiner's reply to this communication is anything other than allowance of all pending claims, then I formally request an additional interview with the Examiner. I encourage the Examiner to call me—the undersigned representative for the Applicant—so that we can talk about this matter so as to resolve any outstanding issues quickly and efficiently over the phone.

[0008] Please contact me to schedule a date and time for a telephone interview that is most convenient for both of us. While email works great for me, I welcome your call as well. My contact information may be found on the last page of this response.

### **Allowable Subject Matter**

[0009] Applicant would like to thank the Examiner for allowing claims 1-6. These claims have not been amended herein, and therefore remain allowable.

### **Claim Amendments**

[0010] Without conceding the propriety of the rejections and in the interest of expediting prosecution, Applicant amends claims 7-9, 14-15, 17-19, 23, 25-26, 31-33, 35, 40-42, 46-48, and 51-52. The claim amendments are made to expedite prosecution and more quickly identify allowable subject matter. In addition, the claim amendments are merely intended to clarify the claimed features, and should not be construed as further limiting the claimed invention in response to the cited references. The claim amendments are fully supported by the Application and do not include new matter. For example, the features of

claims 12 and 13 have been incorporated into independent claim 9. In addition, see page 21, lines 10-19, page 25, line 22 – page 26, line 2, page 26, lines 3-14, and page 27, lines 13-22 of the originally filed Application.

## **SUBSTANTIVE MATTERS**

### **Claim Rejections under § 101**

[0011] Claims 7-8, 17-18, 23, 25, 31-32, 40-41, 46 and 51-52 are rejected under 35 U.S.C. § 101. Applicant respectfully traverses these rejections. Furthermore, in light of the amendments to the claims, Applicant respectfully submits that these claims comply with the patentability requirements of §101 and that the §101 rejections should be withdrawn. Accordingly, Applicant asks the Examiner to withdraw these rejections. In addition, Applicant submits that claims 7 and 8 are allowable because these claims depend from allowed independent claim 1. Further, Applicant submits that claims 17-18, 22, 25, 31-32, 40-41, 46, and 51-52 are allowable for the reasons stated below.

[0012] If the Examiner maintains the 35 U.S.C. §101 rejections of these claims, then Applicant requests additional guidance as to what is necessary to overcome the rejections.

### **Obviousness Rejections**

#### **Lack of *Prima Facie* Case of Obviousness (MPEP § 2142)**

[0013] The arguments presented below point to various aspects of the record to demonstrate that all of the criteria set forth for making a *prima facie* case of obviousness with respect to claims 9, 11, 14-19, 21-26, 28-43, and 45-52 have not been met. For example, Applicant respectfully submits that the cited

art does not teach or suggest all of the features of claims 9, 11, 14-19, 21-26, 28-43, and 45-52.

**Based upon Smith and Kelley**

**[0014]** The Action rejects claims 7-9, 11-19, 21-25, 42-43, 45-48, and 50-51 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,175,845 ("Smith") in view of U.S. Patent No. 6,694,485 ("Kelley"). Applicant respectfully submits that the rejections of claims 12 and 13 are moot because these claims have been canceled and that claims 7-8 are allowable because they depend from allowed independent claim 1. In addition, Applicant respectfully traverses the rejections of claims 9, 11, 14-19, 21-25, 42-43, 45-48, and 50-51 and asks the Examiner to withdraw the rejections of these claims.

**Independent Claim 9**

**[0015]** Applicant submits that the cited portions of Smith and the cited portions of Kelley do not teach or suggest at least the following features of claim 9:

- "determining whether a virtual-page boundary is coextensive with a line of text of a virtual page of the digital document"

- “placing a virtual-page boundary of the page so that such boundary is not coextensive with the line of text when the virtual-page boundary is coextensive with the line of text of the virtual page”
- “determining an overlap area for the virtual page when the virtual-page boundary is not coextensive with the line of text of the virtual page”

With respect to these features of claim 9, page 5 of the Action states:

“While Smith shows a virtual page boundary coinciding with a line of text (See Smith, Figure 3, logical page break 2), Smith does not disclose expressly that the virtual page boundary has the same boundaries as the identified line of text.

Kelley discloses a virtual page break boundary having the same boundary as a line of text (See Kelley, Figure 6, and Column 7, lines 13-32).”

As indicated on page 5 of the Action, the cited portions of Smith do not teach or suggest determining whether a virtual-page boundary is coextensive with a line of text of a virtual page of a digital document, as recited in claim 9. Additionally, in contrast to claim 9, the cited portions of Kelley teach that each row of a reserve table corresponds to a particular line of text and that since one row of the reserve table corresponds to a particular line of text, the lines are fully displayed without any partial lines of text being displayed. (*See Kelley*, col. 7, ll. 13-32). Kelley does not teach or suggest determining whether a virtual-page boundary is coextensive with a line of text of a virtual page of a digital document, as recited in claim 9. Rather, the reserve table of Kelley obviates the need to make such a determination since no partial lines of text will be displayed

when the reserve table is utilized. In addition, the cited portions of Smith and the cited portions of Kelley do not teach or suggest placing a virtual-page boundary of the virtual page so that such boundary is not coextensive with the line of text when the virtual-page boundary is coextensive with the line of text of the virtual page and determining an overlap area for the virtual page when the virtual-page boundary is not coextensive with the line of text of the virtual page, as recited in claim 9.

**[0016]** Accordingly, claim 9 is allowable because the cited art does not teach or suggest each feature of independent claim 9 and Applicant asks the Examiner to withdraw the rejection of this claim.

*Dependent Claims 11 and 14-18*

**[0017]** Dependent claims 11 and 14-18 ultimately depend upon independent claim 9. As explained previously, the cited portions of Smith and the cited portions of Kelley do not teach or suggest all of the features of claim 9. Thus, the cited art does not teach or suggest all of the features of claims 11 and 14-18. Accordingly, claims 11 and 14-18 are allowable and Applicant asks the Examiner to withdraw the rejections of these claims.

*Independent Claim 19*

**[0018]** Applicant submits that the cited portions of Smith and the cited portions of Kelley do not teach or suggest at least the following features of claim 19:



- “determining whether a virtual-page boundary is coextensive with a line of text of a virtual page of the digital document”
- “adjusting the virtual-page boundary into white space before the line of text when the virtual-page boundary is coextensive with the line of text”

As explained previously, the cited portions of Smith and the cited portions of Kelley do not teach or suggest determining whether a virtual-page boundary is coextensive with a line of text of a virtual page of a digital document, as recited in claim 19. Further, the cited portions of Smith and the cited portions of Kelley do not teach or suggest adjusting the virtual-page boundary into white space before the line of text when the virtual-page boundary is coextensive with the line of text, as recited in claim 19.

**[0019]** Accordingly, claim 19 is allowable because the cited art does not teach or suggest each feature of independent claim 19 and Applicant asks the Examiner to withdraw the rejection of this claim.

#### *Dependent Claims 21-25*

**[0020]** Dependent claims 21-25 ultimately depend upon independent claim 19. As explained previously, the cited portions of Smith and the cited portions of Kelley do not teach or suggest all of the features of claim 19. Thus, the cited art does not teach or suggest all of the features of claims 21-25. Accordingly, claims

21-25 are allowable and Applicant asks the Examiner to withdraw the rejections of these claims.

Independent Claim 42

**[0021]** Applicant submits that the cited portions of Smith and the cited portions of Kelley do not teach or suggest at least the following features of claim 42:

- “locating lines of text of the digital document by employing a coarse optical character recognition (OCR) technique that identifies that a line of marks is text without identifying specific content”
- “determining whether a virtual-page boundary is coextensive with a line of text of a virtual page of the fixed digital document”

The cited portions of Smith and the cited portions of Kelley do not teach or suggest locating lines of text of a digital document by employing a coarse optical character recognition (OCR) technique that identifies that a line of marks is text without identifying specific content, as recited in claim 42. In addition, as explained previously, the cited portions of Smith and the cited portions of Kelley do not teach or suggest determining whether a virtual-page boundary is coextensive with a line of text of a virtual page of a fixed digital document, as recited in claim 42.

**[0022]** Accordingly, claim 42 is allowable because the cited art does not teach or suggest each feature of independent claim 42 and Applicant asks the Examiner to withdraw the rejection of this claim.

*Dependent Claims 43 and 45-46*

**[0023]** Dependent claims 43 and 45-46 ultimately depend upon independent claim 42. As explained previously, the cited portions of Smith and the cited portions of Kelley do not teach or suggest all of the features of claim 42. Thus, the cited art does not teach or suggest all of the features of claims 43 and 45-46. Accordingly, claims 43 and 45-46 are allowable and Applicant asks the Examiner to withdraw the rejections of these claims.

*Independent Claim 47*

**[0024]** Applicant submits that the cited portions of Smith and the cited portions of Kelley do not teach or suggest at least the following features of claim 47:

- “a virtual-page analyzer configured to...analyze each respective virtual page to determine whether a respective virtual-page boundary is coextensive with a line of text of a page of the respective virtual page”

As explained previously, the cited portions of Smith and the cited portions of Kelley do not teach or suggest determining whether a respective virtual-page boundary is coextensive with a line of text of the respective virtual page, as recited in claim 47.

**[0025]** Accordingly, claim 47 is allowable because the cited art does not teach or suggest each feature of independent claim 47 and Applicant asks the Examiner to withdraw the rejection of this claim.

*Dependent Claims 48-50*

**[0026]** Dependent claims 48-50 ultimately depend upon independent claim 47. As explained previously, the cited portions of Smith and the cited portions of Kelley do not teach or suggest all of the features of claim 47. Thus, the cited art does not teach or suggest all of the features of claims 48-50. Accordingly, claims 48-50 are allowable and Applicant asks the Examiner to withdraw the rejections of these claims.

*Independent Claim 51*

**[0027]** Applicant submits that the cited portions of Smith and the cited portions of Kelley do not teach or suggest at least the following features of claim 51:

- “determining whether a virtual-page boundary is coextensive with a line of text”

As explained previously, the cited portions of Smith and the cited portions of Kelley do not teach or suggest determining whether a respective virtual-page boundary is coextensive with a line of text, as recited in claim 51.

**[0028]** Accordingly, claim 51 is allowable because the cited art does not teach or suggest each feature of independent claim 51 and Applicant asks the Examiner to withdraw the rejection of this claim.

### **Based upon Smith, Kelley, and Atkinson**

**[0029]** The Action rejects claims 33, 35, and 39-41 under 35 U.S.C. § 103(a) as being unpatentable over Smith in view of Kelley and U.S. Patent No. 4,622,545 (“Atkinson”). Applicant respectfully traverses the rejections of claims 33, 35, and 39-41 and asks the Examiner to withdraw the rejections of these claims.

### **Independent Claim 33**

**[0030]** Applicant submits that the cited portions of Smith, the cited portions of Kelley, and the cited portions of Atkinson do not teach or suggest at least the following features of claim 33:

- “determining whether a virtual-page boundary is coextensive with a line of text for each virtual page of the multiple virtual pages”
- “displaying each virtual page of the multiple virtual pages with overlap, wherein the overlap of one virtual page includes content of the document repeated from another virtual page”

As explained previously, the cited portions of the Smith and the cited portions of Kelley do not teach or suggest determining whether a virtual-page boundary is coextensive with a line of text for each virtual page of multiple virtual pages, as recited in claim 33. Further, in contrast to claim 33, the cited portions of Atkinson teach displaying overlapping folders and the text of those folders. The cited portions of Atkinson do not teach or suggest determining whether a virtual-page boundary is coextensive with a line of text for each virtual page of multiple virtual pages, as recited in claim 33. Additionally, the cited portions of Smith and Kelley do not teach or suggest displaying each virtual page of multiple virtual pages with overlap, where the overlap of one virtual page includes content of the document repeated from another virtual page, as recited in claim 33. The cited portions of Atkinson also do not teach or suggest displaying each virtual page of multiple virtual pages with overlap, where the overlap of one virtual page includes content of the document repeated from another virtual page, as recited in claim 33. Rather, the cited portions of Atkinson teach overlapping folders and text identifying the folders and not displaying virtual pages with overlap that includes content of the document repeated from another virtual page.

**[0031]** Accordingly, claim 33 is allowable because the cited art does not teach or suggest each feature of independent claim 33 and Applicant asks the Examiner to withdraw the rejection of this claim.

**Dependent Claims 35 and 39-41**

**[0032]** Dependent claims 35 and 39-41 ultimately depend upon independent claim 33. As explained previously, the cited portions of Smith, the cited portions of Kelley, and the cited portions of Atkinson do not teach or suggest all of the features of claim 33. Thus, the cited art does not teach or suggest all of the features of claims 35 and 39-41. Accordingly, at least for these reasons, claims 35 and 39-41 are allowable and Applicant asks the Examiner to withdraw the rejections of these claims.

**Based upon Smith, Kelley, and Warnock**

**[0033]** The Action rejects claim 49 under 35 U.S.C. § 103(a) as being unpatentable over Smith in view of Kelley and U.S. Patent No. 5,634,064 ("Warnock"). Applicant respectfully traverses the rejection of claim 49 and asks the Examiner to withdraw the rejection of this claim.

**[0034]** Claim 49 depends from claim 47, which Applicant has shown to be allowable over the cited portions of Smith and the cited portions of Kelley. For example, as explained previously, the cited portions of Smith and the cited portions of Kelley do not teach or suggest analyzing each respective virtual page

to determine whether a respective virtual-page boundary is coextensive with a line of text of the respective virtual page, as recited in claim 47.

**[0035]** With respect to claim 49 in view of Warnock, page 9 of the Action states:

**"As per dependent claim 49,** Smith and Kelley disclose the limitations of claim 47 as described above. Smith and Kelley do not disclose expressly lowlighting repeated content on a virtual page. Warnock discloses lowlighting or using half-tone to visually identify content within a document. (See Warnock, Column 9, lines 19-24)."

However, the cited portions of Warnock do not teach or suggest analyzing each respective virtual page to determine whether a respective virtual-page boundary is coextensive with a line of text of the respective virtual page, as recited in claim 47.

**[0036]** Since the cited art does not teach or suggest each feature of independent claim 47, the cited art also does not teach or suggest each feature of claim 49. Accordingly, claim 49 is allowable and Applicant asks the Examiner to withdraw the rejection of this claim.

### **Based upon Smith and Warnock**

**[0037]** The Action rejects claims 26, 28-32, and 52 under 35 U.S.C. § 103(a) as being unpatentable over Smith in view of Warnock. Applicant



respectfully traverses the rejections of claims 26, 28-32, and 52 and asks the Examiner to withdraw the rejections of these claims.

Independent Claim 26

**[0038]** Applicant submits that the cited portions of Smith and the cited portions of Warnock do not teach or suggest at least the following features of claim 26:

- “determining whether a virtual page boundary is coextensive with a line of text of a virtual page of the fixed digital document”
- “displaying the virtual pages of the multiple virtual pages, wherein unrepeatd content of the multiple virtual pages starts at a common spatial position on the multiple virtual pages and repeated content of the multiple virtual pages is placed above the common spatial position”

As explained previously, the cited portions of the Smith and the cited portions of Warnock do not teach or suggest determining whether a virtual-page boundary is coextensive with a line of text of a fixed digital document, as recited in claim 26. Further, as indicated on page 7 of the Action:

“Smith does not disclose expressly displaying one or more virtual pages with overlap on a virtual page, where the overlap of one virtual page includes content of the document repeated from another virtual page.”

In addition, in contrast to claim 26, the cited portions of Warnock teach using half-tone to visually identify content within a document. (See Warnock, col. 9, ll. 19-24). The cited portions of Warnock do not teach or suggest displaying the virtual pages of multiple virtual pages, where unrepeated content of the multiple virtual pages starts at a common spatial position on the multiple virtual pages and repeated content of the multiple virtual pages is placed above the common spatial position, as recited in claim 26.

**[0039]** Accordingly, claim 26 is allowable because the cited art does not teach or suggest each feature of independent claim 26 and Applicant asks the Examiner to withdraw the rejection of this claim.

#### *Dependent Claims 28-32*

**[0040]** Dependent claims 28-32 ultimately depend upon independent claim 26. As explained previously, the cited portions of Smith and the cited portions of Warnock do not teach or suggest all of the features of claim 26. Thus, the cited art does not teach or suggest all of the features of claims 28-32. Accordingly, claims 28-32 are allowable and Applicant asks the Examiner to withdraw the rejections of these claims.

Independent Claim 52

**[0041]** Applicant submits that the cited portions of Smith and the cited portions of Warnock do not teach or suggest at least the following features of claim 52:

- “determining whether a virtual page boundary is coextensive with a line of text of a virtual page of the digital document”
- “displaying one or more virtual pages of the multiple virtual pages and doing so with lowlighted overlap, wherein the overlap of one virtual page includes content of the document repeated from another virtual page and the lowlighted overlap is positioned above unrepeated content that starts at a common spatial position of the multiple virtual pages”

As explained previously, the cited portions of Smith and the cited portions of Warnock do not teach or suggest determining whether a virtual page boundary is coextensive with a line of text of a virtual page of the digital document, as recited in claim 52. Additionally, as explained previously, the cited portions of Smith and the cited portions of Warnock do not teach or suggest displaying one or more virtual pages with overlap, where the overlap of one virtual page includes content of the document repeated from another virtual page and the overlap is positioned above unrepeated content that starts at a common spatial position of the multiple virtual pages, as recited in claim 52.

**[0042]** Accordingly, claim 52 is allowable because the cited art does not teach or suggest each feature of independent claim 52 and Applicant asks the Examiner to withdraw the rejection of this claim.

**Based upon Smith, Kelley, Atkinson, and Warnock**

**[0043]** The Examiner rejects claims 34 and 36-37 under 35 U.S.C. § 103(a) as being unpatentable over Smith in view of Kelley and Atkinson and further in view of Warnock. Applicant respectfully traverses the rejection of claims 34 and 36-37 and asks the Examiner to withdraw the rejection of these claims.

**[0044]** Claims 34 and 36-37 depend from claim 33, which Applicant has shown to be allowable over the cited portions of Smith, the cited portions of Kelley, and the cited portions of Atkinson. As explained previously, the cited portions of Smith, the cited portions of Kelley, and the cited portions of Atkinson do not teach or suggest determining whether a virtual-page boundary is coextensive with a line of text for each virtual page of the multiple virtual pages, as recited in claim 33. Additionally, as explained previously, the cited portions of Warnock do not teach or suggest determining whether a virtual-page boundary is coextensive with a line of text for each virtual page of multiple virtual pages, as recited in claim 33. Further, as explained previously, the cited portions of Smith, the cited portions of Kelley, the cited portions of Atkinson, and the cited portions of Warnock do not teach or suggest displaying each virtual page of multiple virtual pages with overlap, where the overlap of one virtual page includes content of the document repeated from another virtual page, as recited in claim 33.

[0045] Since the cited art does not teach or suggest each feature of independent claim 33, the cited art also does not teach or suggest each feature of claims 34 and 36-37. Accordingly, claims 34 and 36-37 are allowable and Applicant asks the Examiner to withdraw the rejections of these claims.

**Based upon Smith, Kelley, Atkinson, and Bereiter**

[0046] The Action rejects claims 38 under 35 U.S.C. § 103(a) as being unpatentable over Smith, Kelley, and Atkinson, and further in view of U.S. Patent No. 5,909,217 ("Bereiter"). Applicant respectfully traverses the rejection of claim 38 and asks the Examiner to withdraw the rejection of this claim.

[0047] Claim 38 depends from claim 33, which Applicant has shown to be allowable over the cited portions of Smith, the cited portions of Kelley, and the cited portions of Atkinson. As explained previously, the cited portions of Smith, the cited portions of Kelley, and the cited portions of Atkinson do not teach or suggest determining whether a virtual-page boundary is coextensive with a line of text for each virtual page of multiple virtual pages and displaying each virtual page of multiple virtual pages with overlap, where the overlap of one virtual page includes content of the document repeated from another virtual page, as recited in claim 33.

[0048] With respect to claim 38 in view of Bereiter, page 14 of the Action states:

“Smith, Kelley, and Atkinson do not disclose expressly that the overlap is grayed. Bereiter discloses graying out portions of overlap. (See Bereiter, Figure 3, and Column 4, lines 35-49).”

However, the cited portions of Bereiter do not teach or suggest determining whether a virtual-page boundary is coextensive with a line of text for each virtual page of the multiple virtual pages and displaying each virtual page of multiple virtual pages with overlap, where the overlap of one virtual page includes content of the document repeated from another virtual page, as recited in claim 33.

**[0049]** Since the cited art does not teach or suggest each feature of independent claim 33, the cited art also does not teach or suggest each feature of claim 38. Accordingly, claim 38 is allowable and Applicant asks the Examiner to withdraw the rejection of this claim.

## **Conclusion**

[0050] All pending claims are in condition for allowance. Applicant respectfully requests reconsideration and prompt issuance of the application. If any issues remain that prevent issuance of this application, the **Examiner is urged to contact me before issuing a subsequent Action.** Please call or email me at your convenience.

Respectfully Submitted,

Lee & Hayes, PLLC  
Representatives for Applicant

/Trevor Lind/ \_\_\_\_\_ Dated: September 30, 2008

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